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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/189,793	11/12/1998	BYUNG KEUN LIM	K-039	5887
34610	7590	06/07/2004	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			ELALLAM, AHMED	
			ART UNIT	PAPER NUMBER
			2662	20

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/189,793

**Applicant(s)**

LIM, BYUNG KEUN

**Examiner**

AHMED ELALLAM

**Art Unit**

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30-32, 34-36 and 38-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-32, 34-36, 38-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 30-32, 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 30, 34 and 38, it not clear what is meant by the following "each of the plurality of reverse communication channels and each of the plurality of forward communication channel utilize one channel that comprises forward and reverse direction channels". More specifically, the meaning of ***a reverse communication channel that utilize a "channel" the "channel" comprises a reverse and forward direction channels*** does not make any sense; stated differently, the meaning of channel within a channel within a channel is confusing. In addition, a reverse communication channel that comprises a forward channel and reverse channel is contradictory with the known definition of forward and reversed channel, a forward channel can not be a reversed channel and vise versa, the claims have indefinite meaning.

Claims 31, 35,36, 39 and 40 depend from respective base claims rejected above, thus they are subject to similar rejection.

***Response to Arguments***

2. Applicant's arguments filed February 27, 2004 have been fully considered but they are not persuasive.

112 1<sup>st</sup> Paragraph: The Amendment to the claims has overcome the 112 1<sup>st</sup> Paragraph rejections (new matter) by changing the scope of the claim to eliminate the "frequency band".

Applicant argues that by amending the base claims 30, 34 and 38 to have "the same frequency band" changed to --one channel-- makes the claims allowable over prior art. Examiner respectfully disagrees for at least the reasons indicated above with reference to the indefinite meaning introduced by the amendment into the claims.

In addition, Applicant argues that Omura does not teach the features of amended claims. Examiner note that the claims as amended are indefinite, and they cant be compared to the teaching of Omura. More importantly, Examiner couldn't interpret the claims as amended in light of the specification so that an art rejection can be made. Applicant is respectfully requested to clarify the passage he relied upon in amending the claims, "**page 5, lines 2-3**". Examiner find ambiguous statements in the specification with regard to the meaning of "*channel*", for example, on page 5, lines 2-5, it is recited "*Generally, a low tier communication bandwidth provides sufficient bandwidth for one frequency **channel**. Thus one channel must serve as both the forward and reverse direction communication channel. Accordingly, the CDD method allows a bi-directional communication through one channel by assigning codes to indicate a forward direction communication channel or reverse direction communication channel*", on page 5, lines

11-13 it is indicated that "*N number of unique codes are assigned to a **channel***" and "*some are designated to indicate a forward direction and some are designated to indicated reverse direction communication channel*".

It is assumed that the "**channel**" above, introduced in the claims as amended, is probably meant to state the same carrier frequency as suggested on page 5, line 2, ("**frequency channel**"), and if that is the case, then the claims as amended are not patentable over Omura, as was indicated in the previous office actions. See for example Omura, column 2, lines 38-63.

If Applicant believes that is not what he meant by the "**channel**", then Applicant is respectfully requested to clearly explain what is meant by the "**channel**" introduced by the amendment in relation to the reverse and forward communication channels.

Finally, and regarding Applicant invention as a whole, Applicant is respectfully requested to provide evidence why prior art (excluding Omura) does not teach CDD, and the difficulties and problems to be solved encountered by the scientific community (such as people of skill in the art) to establish CDD, and demonstrate how such difficulties/problems are solved by the Applicant.

### **Conclusion**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (703) 308-6069. The examiner can normally be reached on 9-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM  
Examiner  
Art Unit 2662  
May 28, 2004



**JOHN PEZZLO**  
**PRIMARY EXAMINER**